

226. *Ammoperdix heyi nicolli*. Nicoll's Desert Partridge.

I saw a single specimen near Gebel Asfur (south of the Birket Accrashi) on 28 November, 1917. I am familiar with this subspecies, having shot it on the Wadi Hof and the Wadi Resheid, near Helouan. A female shot in the former Wadi, on 11 March, 1918, was within a fortnight of laying, and was flushed from under a large rock, which concealed, what Dr. Beven and I thought looked like the beginning of a nest. Several pieces of grass and a lot of plant-heads were gathered together, with a slight depression in the centre. Dr. Beven informs me that he obtained young birds, just on the wing, in the Wadi Resheid, at the beginning of May 1919. I hope these slight indications will help future observers in Egypt to discover the eggs of this interesting recently described Partridge.

ERRATUM.—On p. 249 line 11, *for* Abbassia *read* Ibshawai.

XXII.—*First Impressions of Tunisia and Algeria.* By
DAVID A. BANNERMAN, M.B.E., B.A., M.B.O.U., F.R.G.S.
(Plates II.—V.)

OF late years considerable attention has been given by British Ornithologists to the ornithology of northern Africa. Lord Rothschild and Dr. Hartert have, by their exhaustive explorations in Algeria, made the birds of that fascinating country comparatively well known, whilst valuable supplementary notes have appeared from the pens of Messrs. Jourdain, Wallis, and Ratcliff. It is, therefore, with extreme diffidence that I present this short paper to the readers of 'The Ibis.' In the first place, it contains nothing new, and, in the second place, it is not the narrative of an Ornithological Expedition: it is merely the account of a journey through Tunisia and Algeria which some ornithologists have already made and doubtless many others will make in the future. It is to give these latter some idea of the birds they may expect to encounter, and of the scenery they will pass through, that I have ventured to publish my notes.

Field-glasses were substituted for the collector's gun, and much of my time—some eight weeks in all—was taken up in visiting the marvellous Roman and Punic remains of which northern Africa holds such a wonderful store.

We left Marseilles on a bitterly cold morning of February last, in the S.S. 'Duc d'Anmale'—the best steamer of the Compagnie Transatlantique plying between that port and Tunis. The voyage was calm but uneventful, and to my surprise neither Petrels nor Shearwaters were seen. The change in twenty-four hours from heavy clouds and chilly east winds to a cloudless sky and hot sun was as welcome as it was sudden ; and as we passed along the entire westerly coast of Sardinia within easy sight of the little white houses dotted along its cliffs, an interesting, though restricted, view of this island was obtained. From the sea it looked somewhat uninteresting, monotonous low hills succeeding one another until the more mountainous southern extremity of the island was reached.

In the early morning of the 4th of February we steamed past the ruins of ancient Carthage into the calm waters of the Bay of Tunis—up the canal which the French have ingeniously constructed through the lake to the prosperous capital of Tunisia. Tunis strikes the traveller immediately as being a thoroughly well-planned, well-administered town—the French have shown their wisdom in preserving intact the large Arab quarter, the souks and bazaars of which are probably without rival anywhere in the world. But it is of the impressions of an ornithologist that I wish to write, in the hope that others may be stimulated to follow the excellent example set by Mr. Joseph Whitaker and make Tunisia their "happy hunting-ground."

The town of Tunis is itself by no means a bad centre for the ornithologist ; many delightful excursions can be made, and highly-interesting localities visited within a short distance of the city. The electric train which runs to Carthage and La Marsa crosses and then partly encircles the wide Lac de Tunis—a broad sheet of water which has long been the haunt of the Flamingo (*Phœnicopterus antiquorum*).

A glimpse of these fine birds standing knee-deep in the lake may often be enjoyed from the windows of the train, and the sight of a flock rising against the cloudless blue sky with the sunlight catching their rosy plumage is alone almost recompense for the long journey from England. The number of Coots (*Fulica atra atra*) on this lake is really astounding. They are absolutely tame here, and paddle about in hundreds within a few yards of the line.

Bordering the railway-track on the northern side of the lake is a low stone wall, the haunt of numbers of Redshanks (and doubtless other waders besides), which, usually shy birds in England, here do not even cease feeding as the train rushes by. Herons (*Ardea cinerea*) stand sentinel on the wall every hundred yards or so; Little Grebes (*Podiceps ruficollis*) in pairs swim about close to the shore exhibiting little more alarm than their companions; while out on the open water flocks of ducks skim over the surface, keeping, however, well out of gunshot of the shore. Like most salt or brackish lakes, the Lac de Tunis is absolutely devoid of vegetation around its shores, and in consequence those birds which do frequent its muddy margin are easily observed with field-glasses.

Quite apart from the wonderful Roman and Punic remains so skilfully excavated by Père Delattre, the environs of Carthage are well worthy of a visit for the sake of the birds which frequent this world-famous site. In the brilliant sunlight the fields are remarkably green in the month of February, and even the sea-cliffs present nothing of the barrenness usually associated with the north African coast in the minds of homedwelling ornithologists. From the young corn many Crested Larks* sprang up as we passed, gently quivering to earth with wings and tail fully extended, plainly showing the three pairs of dark tail-feathers contrasting with the pale outer and central pairs. Tunisia is, as Whitaker has said, *par excellence* the land in which to study these remarkably interesting birds, though doubtless Hartert would cite Algeria, and Nicoll Egypt, as

* The long-billed form of this district is *Galerida cristata carthaginis*, the short-billed form *Galerida theklæ harterti*.

the countries where the burning questions associated with them may best be settled! Of the varied races of the Crested Lark known to inhabit Tunisia, I shall have more to say later: the country between Carthage and La Marsa is suited rather to Blackbirds, Thrushes, Chaffinches, Whinchats, Whitethroats, Grey Wagtails, Blackcaps, Black Redstarts, and Serin finches, all of which were noted in lesser or greater numbers on the walk along the cliffs. The Sparrows of Tunisia and Algeria have long been a source of perplexity to systematic ornithologists. Whitaker tackled the question in his delightful book ('Birds of Tunisia,' vol. i. pp. 203-204), and showed that the common Sparrow of the Regency was *Passer hispaniolensis hispaniolensis*, though *P. domesticus* inhabited the western districts and interbred extensively with the Spanish Sparrow: while in the south Sparrows which he referred to *P. italicus* were obtained. Hartert has discussed the status of the Algerian Sparrows at great length (Nov. Zool. xviii. 1912, pp. 479-482), and from his carefully considered observations we find that *Passer hispaniolensis hispaniolensis* occurs in Tunisia, as noted by Whitaker, but that the House Sparrow of Tunisia, which interbreeds so largely with the Spanish Sparrow, is *Passer domesticus tingitanus*, while the Sparrows from southern Tunisia (Gafsa) were named *fluckigeri* by Zedlitz, though they are in reality only hybrids, and are not therefore eligible for subspecific rank. These are the birds which Whitaker and others placed under the name *P. italicus*, though Whitaker pointed out that they were by no means typical examples.

An excursion of exceptional interest both to the ornithologist and the archaeologist is to motor from Tunis to Dougga, the site of the most wonderful collection of Roman ruins in Tunisia. Dougga lies over 100 kilometres to the south-west of Tunis, and the excellent road passes through varied scenery. In the immediate vicinity of Tunis the country is very flat, a wide and remarkably fertile plain stretching for miles. Just after leaving the outskirts of the town a delightful view of the Sebkra es-Sedjoui is obtained from slightly rising ground. The lagoon which lies on the south-

west of the town is surrounded by a wide stretch of sand, or, rather, mud, and must be largely resorted to by Waders. We were too far from it to note what birds were about, but two Herons (*Ardea cinerea*) were recognised flying heavily from shore to shore, just as the sun was rising and tipping the distant hills with gold. In all directions the land was under cultivation, green with the young corn, or else in course of being ploughed up by teams of eight oxen. Crested Larks were here observed in great numbers, and as the car flew along many seemed to court death by dusting themselves in the road, escaping the wheels as if by a miracle. Quite a number of Lapwings were noticed, not in flocks but singly or two or three together, and all very tame, not attempting to stir as we passed. Corn-Buntings, Starlings, Sparrows, and Goldfinches were all numerous in flocks, particularly the Goldfinches (*Carduelis carduelis africana*). Brown Linnets (*Acanthis camubina mediterranea*) were also seen, but not in such numbers. Gradually the aspect of the country began to change, green fields gave way to olive-orchards, where Blackbirds* and Thrushes were noted for the first time. Several Common Kestrels were circling overhead, and as we dashed over a bridge a pair of Southern Little Owls (*Athene noctua glauca*) darted out of an old olive-trunk. The road now began to ascend, and the slopes were everywhere thickly covered with scrub. Several Moorish Magpies (*Pica pica mauretania*) were here noticed, while the Algerian Shrike (*Lanius excubitor algeriensis*) was seen perched on the summit of a thorn-bush. As we gradually reached higher altitudes the sun was completely blotted out by many clouds which our chauffeur informed us always lay like a blanket over this particular part of the hilly countryside. Certainly it was unpleasantly cold, but as we neared Dougga the sun again flooded the landscape and lit up the truly wonderful ruins

* It does not seem to have been settled whether the Blackbird inhabiting northern Tunisia is *T. m. algirus*—the race which inhabits northern Algeria—or whether it is *T. m. mauretanicus*—the race which is found in southern Tunisia and southern Algeria; probably it will prove to be the former.

we had come to see. Surrounded by olive-trees, imposingly situated on the mountain-slope, from which a magnificent view of the adjoining country is obtained, the ruined Roman Capitol, Temples, and Theatre bear silent witness to the wonders of the Roman occupation. It was on the terraced steps of the Theatre that I made the acquaintance of one of the most delightful of Tunisian birds, Moussier's Redstart (*Diplootocus moussieri*), a male bird with his orange-brown breast and rump, black wings and head, and strikingly pure white frontal band, eye-stripe and alar patch, making a charming picture in such unique surroundings. Moussier's Redstart is a typically northern African mountain bird, and certainly reminds one more of a Redstart than a Stonechat. It is to be met with in both the northern and southern Atlas Ranges of Tunisia, Algeria, and Morocco. I found it myself both at Dougga and at Hammam Meskoutine in the northern Atlas in February, while Hartert and Rothschild record it from the southern Atlas Ranges during the breeding-season and from the northern Sahara in winter. It is common in the Aurès mountains of Algeria, and Whitaker notes that it is plentiful in the southern oases of Tunisia, leaving these districts in spring for the higher altitudes farther north. In the Moroccan Atlas this species is met with up to considerable altitudes, and Captain Lynes recently found it breeding commonly in the "Middle-Atlas" Range (Ibis, 1920, p. 296).

Birds were plentiful in the olive-groves of Dougga, Starlings and Thrushes (both winter visitors), Chaffinches, and Blue-Tits being observed. The former is a resident Tunisian subspecies (*Fringilla caelebs spodiogenys*), while the latter is the common north-west African race of the Blue Titmouse (*Parus caeruleus ultramarinus*). In some high cliffs close to Dougga a number of Rock-Pigeons were observed. As none were obtained, I cannot say to which race they belonged. Considering that the day was spent in examining Roman remains, the number of birds seen which could be identified without any doubt was distinctly encouraging, for of course a few others were noted which I dare not attempt to name.

Certainly more than one species of Lark and Pipit were seen, but who would dare to name a Pipit from a passing car! The return journey to Tunis added no fresh species to my list, save a couple of Ravens flying high overhead. The Moroccan Raven (*Corvus corax tingitanus*) is an extremely abundant resident in Morocco, Algeria, and Tunisia. Once more we disturbed the Little Owls, which had returned to the same olive-tree from which we had already frightened them, and by 5 P.M. we were again in busy Tunis.

Two days after returning from Dougga I made, in company with the Editor of 'The Ibis,' a delightful trip by car to the Arab city of Kairouan, thence journeying south to El Djem, the most southern point we reached, and thence again to Tunis via Susa, an insignificant port on the coast.

Though birds were not the prime object of our journey, the expedition afforded us an opportunity of seeing for the first time (at any rate as far as the writer was concerned) a number of interesting species, and we obtained a good first-hand knowledge of the varied types of country through which we passed. Whitaker, in the Introduction to his 'Birds of Tunisia,' notes that "Tunisia has been divided by geographers into three natural divisions or regions, each of these differing from the other two in its climate, hydrography, and topography, and consequently in its flora and fauna." In the excellent map provided in his book these three regions are differently coloured, and the divisions can thus be seen at a glance. Whereas Tunis itself lies at the north-east of the northern division, the towns we set out to visit are all situated in the central division, that which lies between the Atlas Mountains and the southern region of the Chotts and deserts.

It was not until we had passed through the broken chain of mountains, which run in a north-easterly direction from El Oubira to Hammamet, and had gained the great plains which stretch almost uninterruptedly to Kairouan, that we noticed the change in the avifauna. North of the mountains we had seen only the usual species which frequent the more fertile parts of the Regency, such as Goldfinches, Brown

Linnets, Corn-Buntings, innumerable Sparrows, Starlings, etc., but once the semi-desert plains with their scrubby vegetation were reached, these lovers of cultivated lands were left behind, and instead we saw Common Cranes, Sand-Grouse, Bustards, and close to Bdj el Menzel, near a sheet of water, innumerable small wading birds which, however, we were quite unable to identify from the car. Crested Larks* were again numerous, but other small birds were seldom seen, save an occasional Shrike or so. Cranes flying in small parties over the scrub, or else standing in little groups on the plain feeding unconcernedly within a few hundred yards of the car, made a charming picture, especially as we had somehow never expected to meet them. According to Whitaker the Common Crane is abundant in Tunisia in winter and during migration, and is then to be seen in large flocks close to Tunis and Carthage. We had not, however, seen any in the northern part of the Regency during our brief visit. It has not been known to breed in Tunisia, but, curiously enough, the Demoiselle Crane (*Anthropoides virgo*), though quite a rare species in Tunisia, has been known to breed near Susa.

We passed close to Sebkra Kelbia, a great expanse of water which looked very much out of place in this flat and otherwise arid landscape. These inland lakes are very remarkable, and must surely be the haunt of vast numbers of waterfowl at certain seasons of the year. From the nature of their position, surrounded by the open plain, and their entire lack of undergrowth, birds resting on the surface would be quite unapproachable from any direction. To explore thoroughly these vast plains and Sebkras it would be necessary to take a tent and camp, the distances being too great to work the ground conveniently from the nearest French hostelry, though much good work could certainly be done by a naturalist staying in Kairouan itself. The climate of Tunisia is delightful, the rain-fall, particularly in the central and southern divisions of the Regency, very small, and we may take Mr. Whitaker's word for it that "as a

* Probably *Galerida theklae superflua*, but none obtained.

country for caravan-travel and nomad-life the Tunisian Regency is perhaps unrivalled." No naturalist, however narrow his interest may be, can fail to be delighted with his first impression of Kairouan, up till the entry of the French in 1881, one of the four sacred Mohammedan cities, through the gates of which none but the followers of the Prophet durst enter. Kairouan is a town of purely Arabic type, surrounded by a remarkably high wall. With its beautiful domed Mosques and towering minarets, and its entirely unspoilt appearance, this wonderful white city has an atmosphere which it is quite impossible to describe, but which grips one from the moment its ancient gates are entered. Wandering through the streets we often encountered Arabs hawking large bunches of Starlings for sale, evidently netted close to the town and eaten largely by the natives. The loathsome practice of bird-liming is also carried on here, and we saw a number of miserable Corn-Buntings being tortured by their thoughtless youthful captivators in the streets of the town and we hastily put them out of their misery. Many of the Arabs keep cage-birds, the African Goldfinch being evidently the favourite, though Blackbirds were also seen and occasionally Turtle-Doves.

On our way to the "Mosque of the Barber" we were interested to see a Southern Little Owl (*Athene noctua glaux*) perched on a tomb in the Arab Cemetery, quietly sleeping in the blazing sun. Within a short distance of the Owl the white hunched-up figure of an Arab rocked in prayer, but the bird seemed undisturbed by the proximity of the droning voice. Our Mohammedan guide told us that the "Booma"—as they call the Little Owl—was a very wicked bird at whose door many vile charges are laid. The bird, he explained, would attack young babies the moment the mother's back was turned, and by swiftly pecking the child's forehead would cause its death unless prevented in time! This astounding story was evidently implicitly believed in by the narrator, and as he had witnessed such a deed "with his own eyes" it would have been but waste of time to question its authenticity!

The Southern Little Owl is abundant throughout Tunisia, frequenting both the olive-groves of the north and the deserts of the south. Unlike the Scops Owl (*Otus scops scops*), which we did not meet with, but which, according to Whitaker, is found frequently after the end of March, the Little Owl is often to be seen in the day-time, as I had already proved for myself.

From the minaret of the Great Mosque a magnificent view of the surrounding country is obtained, and we then realised how isolated this once sacred town really is. On all sides stretched the great plain, not reddish or golden as the Sahara, but uniformly brown save where the crops were shooting through the sunburnt soil, stony in nature and partially covered with plant-growth or camel-grass. This was unquestionably the country of the Crested Lark, and, indeed, save for an occasional Hawk or Harrier, the landscape was otherwise singularly devoid of bird-life.

The Crested Larks of Tunisia have been dealt with at length by Mr. Whitaker in his book, and the members of the genus found in Algeria have been reviewed by Dr. Hartert in *Nov. Zool.* xviii. 1912, pp. 488-496.

Of the long-billed form *G. cristata*, Whitaker recognises only two subspecies, *arenicola* (a pale race) and *macrorhyncha* (a darker race), but he does not give the exact range of these two forms in the Regency: *macrorhyncha*, he notes, inhabits country where "plains and large tracts of level country appear . . . and where plains adjoin or are not far distant from mountains"; *arenicola*, on the other hand, is said by Whitaker to be confined to the inland semi-desert districts of the centre and south of the Regency, not extending north of the Atlas, or even (as far as he was aware) to the sea-coast"—Whitaker found it plentiful on the plains west of Gafsa and on the dry salt marshes of the Chott district.

Since Whitaker published his book, Kleinschmidt and Hilgert have turned their attention to the long-billed Crested Larks of Tunisia, naming, between them, three forms. They showed that the bird which Whitaker referred to as *macrorhyncha* from northern Tunisia was distinct from the

Algerian bird and required a new name, and they proposed to call it *G. c. carthaginiis* (Klein. & Hilg. Orn. Mon. 1905, p. 188: Tunis). In this they seem to have been quite correct.

The bird which Whitaker referred to as *arenicola* they apparently split up, naming those from Gabés to Gafsa *Galerida cristata gafsæ* (Orn. Mon. 1904, p. 189: Seggi), while the birds from the region of the Chott el Djerid (Tozer, Douz, Kebilli) they named *Galerida cristata reichenowi* (Orn. Mon. 1905, p. 189: Kebilli). Hilgert, in his Catalogue of the Erlanger Collection, 1908, pp. 102-104, again reviews these Larks and upholds the three names.

Hartert, in his Vog. Pal. Faun. vol. i. p. xxvi, footnote, states that he considers both *gafsæ* and *reichenowi* to be synonyms of *arenicola*, which he evidently believes to range from the line El Kantara-Touggourt-Bledet-Ahmar in Algeria eastwards through the deserts of southern Tunisia.

The British Museum is singularly deficient in Crested Larks from Tunisia and Algeria, but the few we have at our disposal does not prove Hartert to be wrong! It certainly appears to me that the long-billed Crested Larks from the extreme south-east corner of Tunisia (a district cut off from the rest of the desert country by a range of mountains—the Djebel Matmata) is distinct and requires a name, but as we have not sufficient material from this region, I shall refrain from giving it one for the present. Birds from Tatahouine appear to be much more rufescent in colouring than either so-called *reichenowi* or *gafsæ*.

Of the short-billed group Whitaker recognised four forms in Tunisia: (a) *Galerida theklæ major*, (b) *G. t. superflua*, (c) *G. t. deichleri*, (d) *G. t. carolina*.

Three of these names still hold good, but the bird which inhabits the north of the Regency extending to the Atlas Mts. which Whitaker called *G. t. major*, we now know by the name of *G. t. harterti*—the same form which is found in the north of Algeria. Mr. Whitaker notes that the bird found at the higher elevations is still darker than his *major*, so that there may be yet another form.

G. t. superflua, according to Whitaker, inhabits the central division of Tunisia and the less desert-like districts of the south.

G. t. deichleri is an isabelline form which inhabits the semi-desert inland country of southern Tunisia and does not occur apparently north of Gafsa, while *G. t. carolinæ* is a rufous form inhabiting the rocky inland plains of the south-east of Tunisia.

Until we have a very large series from Tunisia of these Larks we cannot add anything to the distribution as given by Mr. Whitaker in his 'Birds of Tunisia.' It seems desirable to ascertain the range of each particular form of both the long-billed and short-billed Crested Larks with more precision than has been done in the past. A list of actual localities from which the various races have been obtained would greatly help in defining the territory inhabited by the six races up to now described. Dr. Hartert and Lord Rothschild have already carried this out as regards the Algerian species and subspecies.

As I did not collect any Larks I can add nothing to the discussions which have already taken place, but should I return to Tunisia I shall certainly obtain a series wherever I go. That representatives of both the long-billed (*Galerida cristata*) and short-billed (*Galerida theklae*) species are very abundant I can testify from the tour I took in the northern and central parts of the Regency, and I did not enter the southern desert zone at all, where the Larks are of even greater interest than those from the north.

Tunisia is indeed a wonderful country for Larks of many species. Apart from the several forms of Crested Lark (of which there are at least six and possibly more), Whitaker enumerates no fewer than fifteen other species and subspecies belonging to the family Alaudidæ; the genera *Alamon*, *Chersophilus*, *Alauda*, *Ammomanes*, *Calandrella*, *Melanocorypha*, *Rhamphocorys*, and *Otocorys*, all being represented by one or more forms. Unquestionably there still remains good work to be done in determining the exact range of these birds, particularly as regards the members of the genus *Galerida*.

Two nights were spent in Kairouan, and from there we travelled south over the vast plain passing the great salt lake Sebkra Sidi-el-Hani, and thence in a south-easterly direction to El Djem. Quite a number of Cranes were seen on this part of the journey, but little else of interest save the ever present Larks. El Djem boasts a railway station, a small but quite comfortable hotel, an exceedingly filthy Arab village, and the finest monument left by the Romans in Tunisia, an Amphitheatre, colossal in size and wonderfully well preserved, rivalling the Colosseum in Rome. The Amphitheatre is evidently the breeding-place of numerous Rock-Pigeons (*Columba livia*) and many Kestrels. Six or eight of the latter could be seen soaring above the ruin, or else busily engaged in nesting preparations on the highest remaining tiers. Near the Arab village, I remarked a Crested Lark with exceptionally pale sandy-coloured plumage, but as I did not obtain it, I will not venture to give it a name. One would not expect to find either of the true desert forms so far north as El Djem. The first part of the route from El Djem to Susa passes through much the same type of country, the same desert aspect and the same paucity of bird-life as observed between Kairouan and El Djem. As we neared the latter town the landscape quickly changed, rolling olive-clad hills, broken up by deep nullahs, succeeded the plains, and the birds of the orchards at once made their appearance: Turtle-Doves were seen for the first time, as well as Blackbirds, Thrushes, Buntings, Warblers, etc.

Staying the night at Susa, we returned to Tunis by the coast-road. From what I saw of the north I am sure a tour in the south—Gabés, Sfax, Gafsa, Nefta, etc.—would prove of exceptional interest, especially to anyone attracted, as I am, by desert scenery and desert fauna and flora. A very pleasant trip, and one which would give the traveller an excellent insight into desert life, would be to travel from Gabés—a port on the south-east coast of Tunisia—by train or car to Nefta, and from there by camel caravan into Algeria via El Ouëd and Touggourt, whence the railway would bring him to Biskra in nine hours. While at

Tunis I had, with Mr. Sclater, the pleasure of meeting Monsieur Lavauden, a French ornithologist, who is in charge of the "Woods and Forests" department of the Government in Tunisia. Mons. Lavauden has an excellent knowledge of Tunisian birds, and gave us much interesting information on the subject; he has compiled a most useful little brochure on the Tunisian birds, which is noticed in the last number of 'The Ibis' (*cf.* p. 326). Mr. Sclater also visited Mons. Blanchet, a local naturalist of considerable repute, whom I regret I did not have the pleasure of meeting. Both these gentlemen would, I feel sure, be willing to give unstintingly of their ornithological knowledge to any members of the B. O. U. who may chance to visit Tunisia.

Shooting restrictions in Tunisia are much simpler than in the adjoining country of Algeria. Firearms may be taken into the country so long as they are declared at the port of arrival. Gun licences cost under two francs, and only a small tax is charged on the importation of loaded cartridges.

In the south game is said to be plentiful, the widely distributed Dorcas Gazelle (*Gazella dorcas dorcas*) and Loder's Gazelle (*Gazella leptoceros loderi*), as well as the Addax Antelope (*Addax nasomaculatus nasomaculatus*), with its fine spiral horns, being found. The ordinary shooting-season lasts from the middle of August, at which early date few sportsmen will be tempted to brave the blazing sun of the plains, until the end of February; while doubtless the season would be extended for anyone collecting for scientific purposes, the French authorities looking with a friendly eye on all such pursuits.

We left Tunis with deep regret in the early morning of February 16th, travelling by train into Algeria. Our destination was Hammam-Meskoutine, which took eleven hours to reach, but the magnificent scenery through which the line passes prevented any thought of tedium. Passing at first through fertile valleys, olive-clad slopes, and then bare hills, the scenery becomes grander as the higher altitudes are approached, often skirting, often crossing and

re-crossing the great bed of the Medjerda river, the course of which the line follows for a considerable distance; the train gradually ascends until surrounded on all sides by a tumbling mass of mountains clothed at the highest points with magnificent forests of Cork and Evergreen Oaks.

I do not know whether any ornithologist has ever worked in this country, but I can imagine no more suitable district for studying the mountain and forest fauna than that just described, particularly when the Tunisian-Algerian boundary has been crossed. The stretch of mountain scenery between Souk-Ahras (2297 ft.) and Aïn-Tahamimine (1100 ft.), which reaches at Laverdure an altitude of over 2500 ft. with mountains of 4150 ft. towering above, is incomparably beautiful. Eagles on more than one occasion were seen, one bird flying for some distance parallel with the train and almost within gunshot of the carriage. Owing to the sun I was unable to get a satisfactory view of its plumage, but I believe it to have been the Golden Eagle, which is found sparingly throughout the northern Atlas Mountains of Algeria and generally throughout the more mountainous parts of Tunisia.

The line now gradually descends, and as we neared Hammam-Meskoutine the country opened out, olives once more clothed the slopes, and in every direction the country bore a highly prosperous and luxuriant appearance.

Hammam-Meskoutine or The Baths of the Petrified, as its name implies, from an ancient Arab legend, is charmingly situated from an ornithologist's point of view. The hotel and farm buildings are almost the only houses in sight. In the pretty courtyard, round which the hotel is built, palms, orange and lemon trees are the haunt of numerous Dusky Bulbuls (*Pycnonotus barbatus barbatus*), the first we had met with. Redbreasts (*Erithacus rubecula* subsp.?) hopped about under the shade of the trees, a Grey Wagtail (*Motacilla cinerea cinerea*) frequented the irrigation stream, and innumerable Sparrows filled the air with their noisy chatter. Lord Rothschild and Dr. Hartert paid particular attention to the Sparrows at Hammam-Meskoutine and

collected a large series here. Typical examples of both *Passer hispaniolensis hispaniolensis* and *P. domesticus tingitanus* were obtained by them, and their remarks on the intergrading of these two forms as observed at Hammam-Meskoutine will be found in Nov. Zool. xviii. 1912, p. 480. I had the advantage of having a copy of this paper with me, and with the aid of my powerful field-glasses was able to match from live birds under my observation quite a number of the Sparrows' heads depicted in Pl. xi. of the paper cited. The Redbreasts puzzled me somewhat. They appeared very pale-breasted, but then I am used to watching the fine *Erithacus rubecula superbis* of certain of the Canary Islands, with its rich coloured breast. Mr. Jourdain believed that most of the Robins which Mr. Wallis met with at Hammam-Meskoutine in 1910 were migrants from Europe. Dr. Hartert, in addition to many typical specimens, shot an example of *E. r. witherbyi* at this place in February 1911. I confess I am unable to tell this race apart in life.

So many ornithologists have worked in this district that the birds of the neighbourhood are now comparatively well known. A short description of the surrounding country may, however, be of interest to those who have not seen it for themselves. Hammam-Meskoutine lies in the northern Atlas range at a height of 1312 ft. In the vicinity of the hotel the country is very open, and in February wonderfully green, the wide valleys are everywhere sown with corn, the lower hill-slopes covered with grass for grazing or planted with olive-trees, which in some directions cover the hillsides as far as the eye can reach. Hot springs bubble up in many places, and the water, which issues from the ground at a temperature of 205° F., finds its way through a tangle of luxuriant vegetation down the bed of the valley, its course clearly visible by the constantly rising steam. Great clumps of palm-trees grew luxuriantly in these valleys, their presence appearing somewhat incongruous in this typically park-like landscape (Plate II. fig. 1). On all sides mountains rise in the distance, covered closely with scrub four or five feet in height, or else bare save for the scant coarse grass which



1. A typical landscape, Hammam-Meskoutine.



2. The Oued bou Hamdane, Hammam-Meskoutine.

gives a patchy appearance, resembling from a distance a well-burnt Scottish moor.

Every day for two weeks I rode over these hills on the excellent little Arab horses to be hired at the hotel, or else explored the river-bed of the Oued bou Hamdane (Plate II. fig. 2), in places almost dry save for two or three narrow channels easily fordable at almost any point.

No matter what direction is taken birds are everywhere really plentiful. Close to the hotel, in the thick undergrowth of the valleys and on the olive-clad slopes, we observed Greenfinches (*Chloris chloris aurantiiventris*) in small numbers almost every day, Chaffinches (*Fringilla cœlebs africana*), numerous Blackbirds (*Turdus merula algerius*), Song-Thrushes (*Turdus philomelus philomelus*), Redbreasts (apparently *Erithacus rubecula rubecula*), Dusky Bulbuls (*Pycnonotus barbatus barbatus*), Brown Linnets (*Acanthis cannabina mediterranea*) in small flocks, and Goldfinches (*Carduelis carduelis africana*) in considerable numbers, Starlings (*Sturnus vulgaris vulgaris*) in huge flocks, Sparrows, Corn-Buntings (*Emberiza calandra calandra*), Blue Titmice (*Parus caeruleus ultramarinus*) very few, Blackcaps (*Sylvia atricapilla atricapilla*) rather rare, Sardinian Warblers (*Sylvia melanocephala melanocephala*), and Kestrels (*Cerchneis tinnunculus tinnunculus*).

On the more rocky ground, covered with grass, small scrub, and olives, the Barbary Partridge (*Alectoris barbara barbara*) is plentiful. All were paired by the time I arrived on the 17th of February. In the reeds of the dry river-bed I caught a hasty glimpse of a Warbler, but am uncertain of the species to which it belonged. Birds of Prey were nearly always observed once the higher ground had been reached. Most commonly seen was the Golden Eagle (*Aquila chrysaëtus*). On the 25th of February I saw three together sailing majestically along the hillside, whilst another eagle, observed on one occasion only, was, I believe, Bonelli's Eagle (*Eutolmæetus fasciatus fasciatus*), a bird with which I am unfamiliar. Bonelli's Eagle is recorded by Messrs. Wallis and Jourdain (*Ibis*, 1915, p. 157) as breeding at

Hamman-Meskoutine in February 1906, and the species was seen by the former observer in 1910 and 1912 in the same locality. Hartert also records Bonelli's Eagle (Nov. Zool. xviii. p. 534) from the same place, so that I feel pretty sure of my identification.

Irby's Raven (*Corvus corax tingitanus*) was also occasionally seen in pairs.

Crested Larks are very plentiful on the cultivated lands, and they seem to love particularly the grassy strips left on either side of the dusty main roads. It is a dark race, as might be expected, which frequents this district, known as *Galerida thekla harterti*.

I can only add two species (by name) to the list of Hamman-Meskoutine birds recorded by Rothschild, Hartert, Wallis, and Jourdain, one being Moussier's Redstart (*Diploptocus moussieri*). On two occasions I saw a male of this unmistakable species, once close to the "Petrified Arabs," the huge cone-shaped deposits of calcareous tufa, which are such a remarkable sight close to the boiling waterfall, and a single bird was seen on higher ground when Mr. Selater and I were out riding on the 21st of February. The other bird, which I believe has not previously been seen, though Hartert heard it, was the Barn-Owl. Just as we were leaving on the 26th of February, my attention was called to a tree in the hotel garden in which a number of Bulbuls were making a tremendous noise. On approaching I found they were mobbing a Barn-Owl, which, I believe, from its very white breast, to have been *Tyto alba alba*. The Bulbuls were keeping a very respectful distance from their unwelcome visitor, extending their tails and wings, which they kept in a constant state of motion, while twittering and scolding incessantly. The Barn-Owl is evidently a rare bird in Algeria. Only once did I see a bird during my stay at Hamman which really puzzled me. I was forcing my horse along a mountain path in the direction of Roknia, through particularly thick scrub, when I saw something running under a bush. Pushing the horse towards it off the track, I managed to flush a bird, which might have been a glorified quail. It



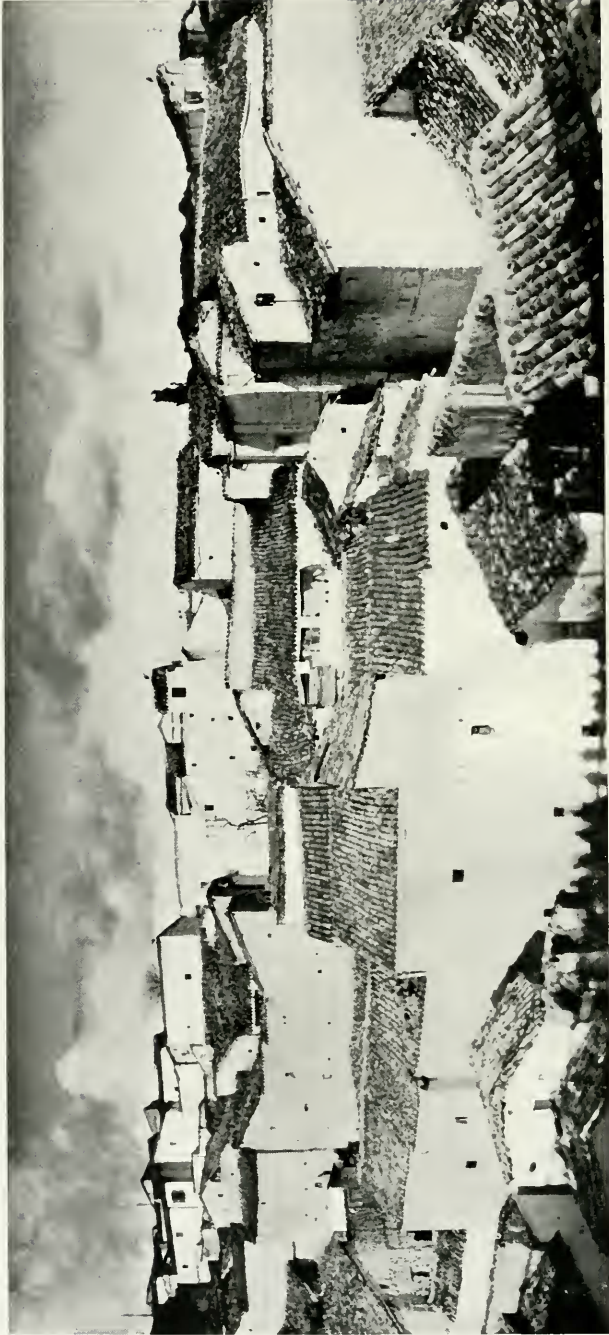
The Gorge of the Rummel, Constantine.

certainly had no tail to speak of, and had very rounded wings, dark upper parts, not a particularly long bill, and the legs were not visible. It seemed quite dazed by the sun, and with slow almost butterfly-like flight dropped into the bush again some 20 feet from me, whence I failed to dislodge it. It was *not* an Owl as has been suggested. It might have been a short-legged Rail, but what a curious place in which to find one! In size it reminded me of a young Partridge on the 1st of September.

Quite a number of birds recorded by other ornithologists were not seen by me at Hammam-Meskoutine, as, for instance, the Hawfinch (*Coccothraustes coccothraustes burryi*), noted by Hartert, and met with by Mr. Wallis abundantly in March and April 1911, the Golden Oriole (*Oriolus oriolus oriolus*), recorded by Wallis on 1st March, and Hartert on 20th May, the Serin (*Serinus canarius serinus*), recorded by Wallis on 21st April, and by Hartert in February, the Siskin (*Carduelis spinus*), seen by Hartert in February 1911. The Common Chaffinch (*Fringilla coelebs coelebs*) was seen in this district by Hartert, as well as *F. c. africana*, but all those observed by me belonged to the latter North African race. The African Rock-Bunting (*Emberiza cia africana*), recorded by Wallis in April, was absent, and a long list of other species including a number of birds of passage, all of which will be found enumerated in the two papers cited. No true migrants were observed, Swifts, Swallows, and Martins were conspicuously absent, and members of the Warbler family were remarkably scarce. The great rush to Europe had not yet commenced.

Hammam-Meskoutine is indeed a splendid centre from which to gain a first-hand knowledge of the birds of the more mountainous parts of northern Africa. We left this interesting district on the 26th of February, making our way west to Constantine, a town about which much has already been written. The line passes close to the rugged Djebel Taya, famous as the habitat of the North African Bearded Vulture (*Gypaëtus barbatus barbatus*). Constantine enjoys a unique position on a hill surrounded on three sides by the

wonderful Rummel Gorge (Plate III.), varying in places from 330 to 690 ft. in depth and from 230 to 550 ft. in breadth. Its precipitous sides are the breeding-place of countless numbers of Lesser and Common Kestrels, Jackdaws, and Rock-Pigeons. It is, as Dr. Hartert has, I think, already said, one of the few places in the world where one may stand in a busy thoroughfare and gaze down upon all these birds soaring below, and maybe a Peregrine Falcon will be seen, as I had the luck to see one, dashing under the great suspension bridge (551 ft. in length and 671 ft. above the river) which leads to the hospital; Egyptian Vultures and Ravens were also seen in the Gorge, and later in the season it is frequented by numerous Alpine Swifts, which, however, had not arrived by the 3rd of March. All round the top of this gorge runs a fine carriage drive, from which is obtained one of the finest views imaginable. To the west and north-west stretches a tremendous valley backed as far as the eye can reach with mountains. Whether viewed under the merciless rays of the noon-day sun, or during the softer lights at sunset, the panorama is exceedingly beautiful. Pallid Swifts had not yet made their appearance, but on the 1st of March a number of House-Martins, which were certainly not there on the previous days, were seen flying up to their old nests under the eaves of a public building on the ramparts. I counted the nests on this building, and I found 91 old, but for the most part habitable, nests on the front alone. The building had a frontage of 93 ft., two feet of which were occupied by water-pipes. At the back there were 90 nests at least, and on one of the sides 15, while on the other side the architecture did not allow of one nest to be built. The total was the prodigious number of 196 nests on only a moderate-sized building. On the hillside east of the town lies a small forest of fir-trees singularly devoid of bird-life on the day of my visit, while below the River Rummel winds through the wide valley towards El Guerrah, the junction of the line to Biskra. Constantine will live in my memory, not only for the unique Rummel Gorge and the marvellous views obtained from the ramparts, but also for the remarkable



White Storks on their nests in the Arab Town, Constantine.

number of White Storks (*Ciconia ciconia ciconia*) which make their home in the Arab quarter of the town. On the picturesque old red roofs of the houses which rise in tiers to the north-east of the bridge of El Rached (Plate IV.), I counted as many as forty Storks sitting or standing by their great nests, while a number of others were flying overhead, their long necks and legs stretched out to their full extent. This, of course, is the usual position in which the Stork flies, but I have also seen them wheeling overhead at a considerable altitude with their legs drooping down, as if preparatory to alighting. Unmolested by the Arabs, the Storks of Constantine add greatly to the already wonderfully picturesque Rue Perregaux, from various points of which the great birds and their nests may be observed at close quarters.

In the early morning of 3rd March we left Constantine for Biskra by the now well-known tourist route to the oasis on the fringe of the desert. At this early hour numerous Storks were seen in the fields, busily feeding; at Kroubs, where they were particularly numerous, I noticed four huge nests built in one small tree bare of leaves, which hardly appeared large enough to support one such ungainly structure. Between Ain M'lija and Ain Yagout the train traverses an immense flat stony plain, for the most part covered with grass, to the west of which rugged limestone hills rise abruptly. Lapwings, Starlings, Larks, and great numbers of Sparrows were constantly seen from the train. East of the line the distant mountains were white with snow. Several shallow salt-lakes were passed surrounded by rough, rush-covered ground with here and there inviting pools, where a great many small wading birds were observed.

The line runs close to the Salt Chotts Tinzilts and Ez Zemoul absolutely bare of vegetation around their edges. To my disappointment not a bird was to be seen. On the 20th of February, thirteen years previously, Dr. Hartert found on the former sheet of water many Ducks, a few Gulls, and hundreds of Fiamingoes. The station, "Les Lacs," is on the very edge of the lake, and as the train pulls up there for a few minutes and then sweeps round one side

of Chott Tinzilts, birds, if present, could not escape notice. Backed by distant snow-capped mountains, the blue expanse of water, surrounded by low, absolutely barren, reddish-tinted hills, made a singularly attractive picture, and only needed the Flamingoes to complete the scene.

Beyond "Les Laes" great plains stretch to El Mahder, covered when not under cultivation with camel grass, where numerous large flocks of Starlings (*Sturnus vulgaris vulgaris*) were observed. Considering the poor quality of much of the soil, the extent of land under cultivation is really remarkable. As we neared Batna the mountains, still deeply capped with snow, increased in altitude, and were, as we soon discovered, thickly clothed with forest and scrub; the forest covers a large area as seen from the train alone, and consists, I believe, chiefly of cedar mixed with oak.

Batna, which is also the home of a great number of White Storks, is perhaps the best centre from which to explore the Aurès Mountains. It was from here that Dr. Hartert set out to ascend Djebel Mahmel, the type-locality of Seeböhm's Wheatear (*Enanthe ananthe seebohmi*), whilst the oak woods above Lambèse may be conveniently worked from that place. Between Batna and Biskra the train carries one past varied scenery—first through a wide valley flanked on either side by hills thickly covered with cedar forest, known as the Forêt d'Ichali, then through plains partly cultivated, partly grazing land, but with every kilometer the vegetation becomes more scanty and less green than farther north. By the time Tamarin is reached the country has already taken on quite a desert aspect. Close to the little station, where pomegranates, apricots, and tamarisks—the fruit-trees in full blossom—seemed to be almost the last sign of cultivation, six Common Cranes were seen in a field. South of Tamarin, barren undulating hills, cut up by dry nullahs, heralded the approach of the desert, and soon the line ascended into wild mountainous country, where the rugged hills were clothed only with the scantiest of plant-life. There was not a tree in sight, not even a nomad's tent. We were now close to the famous gorge of El Kantara, and eagerly scanned the

sky for a chance sight of a Bearded Vulture (*Gypaëtus barbatus barbatus*).

Just before the gorge is entered the train pulls up at the station of El Kantara. Ornithologists are recommended to make a stay at the Hôtel Bertrand, which has been built in a picturesque position almost in the mouth of the gorge itself. Apart from the possibility of seeing the Bearded Vulture, the great cliffs of the Djebel Metlili and the immediate ranges east of El Kantara are the breeding-place of Egyptian Vultures (*Neophron percnopterus percnopterus*), Golden Eagles (*Aquila chrysaëtus*), and Bonelli's Eagles (*Eutolmætus fasciatus fasciatus*), African Buzzards (*Buteo feròx cirtensis*), Algerian Lanner Falcons (*Falco biarmicus erlangeri*), Black Kites (*Milvus migrans migrans*), and probably other accipitrine birds as well, a sufficiently interesting collection to entice most ornithologists to break their journey to Biskra at this favoured spot. Many other birds, other than birds-of-prey, may be seen in the neighbourhood of El Kantara, and a week at least can be comfortably spent there, even if time is pressing.

Many pens have doubtless attempted to describe the swift passage from the dark towering precipices of El Kantara and the grandeur of the Aurès Mountains to the solitude and glare of the great Sahara. Truly has the gorge been called the Gate of the Desert. As the train approaches the apparently solid wall of rock, as viewed from the station, a glimpse is caught of a turbulent boulder-strewn stream rushing through the narrow pass and lined on either bank with palm and fruit trees; above rise the great jagged cliffs, throwing everything far and wide into shade. The train winds in and out of three short tunnels, between which fascinating glimpses of the palms and bed of the rushing torrent are obtained. Suddenly the wall of cliff ends, and in a flood of light one gazes down upon a sea of waving palm-trees, and beyond the infinite space of the desert.

Over the great plain of El Outaïa, the forecourt of the Sahara, entirely encircled by mountains, the train slowly winds its way, stopping for a short while at the village and

palm oasis from which the plain takes its name. Both Kites and Kestrels were seen in the neighbourhood, the former doubtless the Black Kite (*Milvus migrans migrans*). The huge expanse, flat as a billiard-table save for the intersecting dry watercourses, is absolutely bare and sandy, partly covered with small stones and partly cultivated, patches of exceedingly green corn standing out in striking contrast to the drab desert soil. This is the home of many interesting birds—the Calandra Lark (*Melanocorypha calandra calandra*), the Algerian Desert Lark (*Ammomanes deserti algeriensis*), Hilgert's Crested Lark (*Galerida thekla hilgerti*), the Western Russet Wheatear (*Enanthe hispanica hispanica*), the African Black Chat (*Enanthe leucura syenitica*), the Pied Chat (*Enanthe lugens halophila*), and several other desert birds which I found there on future visits.

The plain takes some time to cross, but gradually we drew near to the low range which obscures the view of Biskra and the true desert beyond. Running parallel with the course of a wide river-bed, the line passes through a cutting in the Chaîne du Sfa, and as we emerged from the hills the great oasis of Biskra came into view, with a single white tower standing conspicuously above the palms and cypresses. To the east and west the Aurès Mountains recede into the distance, while to the south stretches the immeasurable golden desert, broken only by lines of dark green marking other oases on the horizon—and so the edge of the Sahara is reached at last.

Three delightful weeks were spent in the oasis exploring the neighbourhood. For a naturalist arriving at Biskra for the first time, there is so much to see, and so much to do, that the time slips away before half is accomplished. Dr. Hartert had kindly instructed me where to go and what to look for, and armed with his paper "Ornithological Explorations in Algeria" (ex Nov. Zool. xviii.), with Mr. Jourdain's "Notes on the Bird Life of Eastern Algeria" (Ibis, 1915), Whitaker's 'Birds of Tunisia,' and Witherby's 'Practical Handbook of British Birds'—the last-named invaluable for the identifying

of migrants—I found Biskra and its environs all that its admirers had claimed for it. From our comfortable quarters in the Hôtel du Sahara we were able to make easy expeditions in many directions—on horseback, in carriages, on camel, or on foot. Thus the plain of El Outaïa is within easy reach, also the sand-dunes, the stony desert, the sandy desert, the bare rugged hills, and the wide bed of the Oued Biskra, the extensive palm-groves of Vieux Biskra, the wonderful garden of Count Landon, each holding their own particular birds, only a cursory knowledge of which can be obtained in a three weeks' visit. Later in the season (we left Biskra on the 24th of March) the oasis is full of migrants passing on their long journey north. On March 13th I met a French sportsman returning with four or five couple of Quail, which he had shot in the fields on the outskirts of the oasis—the first arrivals of the season, so he informed me. By the third week in March, Swallows and House-Martins had become common, frequenting particularly the Oued Biskra and the cornfields on the outskirts of the oasis. The young palm-groves were teeming with Warblers, apparently on passage; but of other migrants, such as Bee-eaters, Rollers, Swifts, and Redstarts, none had yet arrived. Had we remained another month we should doubtless have found them in numbers. Rock-Martins were, however, observed in one place only, half a dozen of these birds flying round the old watch tower, built on a commanding rock near the entrance to the town. Hartert records them from near Biskra in February, March, and April.

The birds of Biskra and its neighbourhood have been so thoroughly studied by Lord Rothschild, Dr. Hartert, and others, that I can add nothing whatever to their exhaustive work. On 16th March we left for Touggourt—an Arab market-town of considerable importance 132 miles south of Biskra. The comfortable train, running twice weekly, takes from 8 A.M. until 4.30 P.M. to cover the distance, but the leisurely journey gives one ample time to study the topography of the real desert, so unlike the Sahara as seen in our childhood's picture-books! A great part of the way

from Biskra to Touggourt the desert was partially covered with plant-life—heavy rains had fallen, and the result was abundantly manifest. The formation of the myriads of tiny sand-mounds which dot the plain, through the agency of the bushes *Limoniastrum*, *Salsola*, etc., has already been ably explained by Dr. Hartert, and even from the carriage windows it is evident that these little hillocks are the centre of the animal life of the desert. The line passes within view of the Chott Melrir and Chott Merouan, and the sight of these vast sheets of water alone upsets one's preconceived idea of the Sahara. Unfortunately, now that it is no longer necessary to spend three or four days over the journey, the ornithologist must not expect to get much idea of the bird-life; he will not, for instance, catch a glimpse of *Galerida theklae deichleri*, the pale Crested Lark which is found on the stony patches amidst the sandy desert, nor of *Ammomanes phœnicura arenicolor*, of *Fremophila alpestris bilopha*, or even of *Almon alaudipes alaudipes*, the Bifasciated Lark which occurs, we know from past explorers, in the sandy parts of the desert and even on the bare dunes. To see these birds in their home-surroundings the journey must be made on camels, as Lord Rothschild and Dr. Hartert have always done in the past. The remarkable spectacle of a whirlwind of powdered saltpetre was witnessed at one point during our journey, when the train was passing over a plain glistening white as freshly fallen snow, the surface being encrusted with crystallized nitre. This part of the desert lies considerably below the level of the sea. Two or three days were spent at Touggourt, and from there my wife and I rode on mules to Temacin and Zaouia, taking mint tea at the latter village with the renowned Marabout who had entertained Lord Rothschild and his party in 1909.

Between Touggourt and Temacin the desert is of a very different nature from that farther north; much of the way leads through sand-dunes (Plate V. fig. 1), where only *Galerida cristata arenicola* was observed. Large tracts of the desert, particularly where the sand is hard, are covered with pieces of gypsum, which sparkle in the sunlight like pieces



1. The Desert, nearing Temacin.



2. The Oasis of Temacin, Algerian Sahara.

of glass. Temacin and Zaouia are well worth a visit, as they are purely Saharan villages of very considerable interest. They give one a splendid idea of what a Saharan oasis really is like. Arab life and customs are here quite untouched by French influence or tourists, which can not be said of Biskra or even of Touggourt. Birds were very scarce in Temacin and Zaouia, with the exception of one or two White Wagtails, and Palm-Doves, which were numerous, walking about on the flat roofs of the mud-built houses and also in the streets. A wonderful view of the desert is obtained from the minaret of the Mosque at Temacin (Plate V. fig. 2), the immense dunes lying between Touggourt and El Ouéd being plainly visible, while three sheets of water appear not so very far away.

After a journey such as this into the desert, the bird-life at Biskra strikes one as being remarkably plentiful—Siskins, Blue-Tits, Saharan Buntings*, Blackbirds †, Hoopoes, Warblers, Wagtails, Swallows, Martins, Sparrows, and Palm-Doves enlivening the oasis, not to speak of the Wheatears, Chats, and innumerable Larks which can be found in the surrounding desert within ten minutes' walk of the principal hotels. It was therefore with great regret that we finally left Biskra on the 24th of March for the town of Algiers. Crossing the plain of El Outaïa, two Cranes and a Black Kite were seen, the former evidently on passage, but the latter breeds in the neighbourhood. An even better view of the Gorge of El Kantara is obtained when approaching it from the south, the remarkable folds in the strata of the hills to the west of the gorge arresting the attention from a long distance: again no Vultures were in sight, but fourteen Irby's Ravens were wheeling in great circles overhead. As we climbed once more into the wild country lying immediately north of the gorge, the mountains were lit up by a magnificent sunset and their barren slopes turned to gold and red and purple, a desolate but grand panorama impossible to describe. To what a different

* *Emberiza striolata sahari.*

† *Turdus merula mauritanicus.*

scene we awoke next morning. The train was nearing Algiers, rushing through the most luxuriant countryside, woods carpeted with wild flowers, orchards in blossom, vineyards, acres of waving corn, and fields which looked greener than those in southern France! Goldfinches and Chaffinches and many woodland birds were seen on all sides; everywhere there were streams swollen beyond their banks. The town of Algiers—even if one stays at Mustapha Superieur—is not in itself a convenient place from which to observe bird-life. Although the pine-woods at the back of Mustapha seemed full of the common species, and Greenfinches, Chaffinches, Goldfinches, Corn-Buntings, etc., were observed in some numbers in the neighbourhood, the district is too populated to be really of much interest to the ornithologist. Two Cuckoos were seen and heard in a pine-wood close to the hotel on 27th March—the first we had met with during our travels, and the only true birds of passage noted. Our last excursion was to the Ruisseau des Singes and the grand Gorge of Chiffa, a delightful drive, especially in the early spring. The views of the mountains were superb, and soon after entering the deep gorge, two great birds, which may have been Griffon Vultures, were observed sweeping along the mountain side many hundred feet above us, but at too great an elevation to identify. Three Kites were also seen at very close quarters just before we reached the gorge mouth. The apes which swarm on the mountain side, close to the little hotel, have become extraordinarily tame and come down in numbers—old males, females, and young—to be fed by the excursionists who make this naturally secluded spot their goal on a holiday. The sight of the apes running all over the roof of the hotel and climbing from balcony to balcony, entering the bedrooms whenever a chance occurred, did not inspire us to remain for the night, and we forthwith returned to Algiers.

The following day, 29th March, we sailed for Marseilles in the S.S. 'Timgad,' full of regrets at leaving this wonderful country of forests and orchards, mountains and deserts.